

IN THE CLAIMS

1. (Currently Amended) A method of operating a client that retrieves resources using HyperText Transfer Protocol (HTTP) commands, the method comprising:
 - parsing a domain name field for a telephone number that identifies a point-to-point HTTP server;
 - comparing the parsed telephone number to [[any]] one or more open telephone numbers identifying [[any]] one or more open point-to-point HTTP connections;
 - when an open telephone number matching the parsed telephone number does not exist, accessing a public-switched-telephone-network line;
 - dialing, on the accessed line, the parsed telephone number for the point-to-point HTTP server;
 - indicating that the client requests termination of the line as an HTTP connection to the point-to-point HTTP server; and
 - establishing a link layer connection with the point-to-point HTTP server using physical addressing;
 - interacting with the point-to-point HTTP server over the accessed line and over the established link layer connection using non-packetized HTTP protocol requests and responses without the necessity of an intervening packet-routing network;
 - wherein interacting with the point-to-point HTTP server does not require connecting to an Internet Service Provider (ISP).
2. (Previously Presented) The method of claim 1, wherein the domain name field is included in a Uniform Resource Locator (URL) and is associated with a Domain Name Service (DNS) query.
3. (Previously Presented) The method of claim 2, wherein the domain name field does not include a domain name.
4. (Previously Presented) The method of claim 2, wherein the URL indicates a point-to-point-HTTP-reachable resource by the presence of a telephone number in the domain

name field.

5. (Previously Presented) The method of claim 1, wherein indicating that the client requests termination of the line as an HTTP connection is accomplished over the PSTN and comprises transmitting at least one tone indicative of a point-to-point HTTP session, on the accessed line.

6. (Currently Amended) The method of claim 1, wherein indicating that the client requests termination of the line as an HTTP connection is accomplished over the PSTN and comprises requesting a ~~TCP~~ Transmission Control Protocol (TCP) connection to a TCP port on the server designated for point-to-point HTTP service.

7. (Currently Amended) A method of operating a point-to-point HTTP HyperText Transfer Protocol (HTTP) server associated with a telephone number, the method comprising:

monitoring a public-switched-telephone-network line for incoming calls;

identifying an incoming call as established by a client that parsed the associated telephone number from a domain name field for comparison to one or more open telephone numbers;

~~when an incoming call indicates a point-to-point HTTP call type, terminating the call with a connection to the server;~~

providing a link layer connection with the client, the link layer connection established using layer two physical addressing; and

interacting with ~~[[a]]~~ the client served by the link layer connection using non-packetized HTTP requests and responses;

wherein interacting with the client does not require connecting to, or communicating with, an Internet Service Provider (ISP).

8. (Currently Amended) The method of claim 7, further comprising detecting that ~~[[an]]~~ the incoming call is of a point-to-point call type by detecting a signal comprising at least one tone on the public-switched-telephone-network line, the signal indicative of a point-to-point

HTTP call type.

9. (Currently Amended) The method of claim 7, further comprising detecting that [[an]] the incoming call is of a point-to-point call type by designating a ~~TCP~~ Transmission Control Protocol (TCP) port on the server for point-to-point HTTP service, and associating [[an]] the incoming call requesting a TCP connection to that TCP port as a request for point-to-point HTTP service.

10. (Original) The method of claim 7, further comprising requesting authentication of the client as an authorized user.

11. (Currently Amended) The method of claim 7, further comprising parsing a resource path present in an HTTP request received from the client, determining whether the resource path is for a local resource available at the server, and when the resource path is for a remote resource not available at the server, determining whether the server can obtain the remote resource from a remote host.

12. (Currently Amended) The method of claim 11, where determining whether the server can obtain the remote resource from [[a]] the remote host comprises parsing a host identifier from the resource path.

13. (Original) The method of claim 12, further comprising comparing the host identifier to identifiers contained in an information base available to the server.

14. (Currently Amended) The method of claim 11, wherein when the server determines that the remote resource is available from the remote host, the method further comprises requesting the remote resource from the remote host, receiving the remote resource from the remote host, and forwarding the remote resource to the client.

15. (Currently Amended) A point-to-point HTTP HyperText Transfer Protocol (HTTP) server associated with a telephone number, the HTTP server comprising:
means for connecting the server to a public-switched-telephone-network line;
means for identifying an incoming call as established by an HTTP client that parsed the associated telephone number from a domain name field for comparison to one or more open telephone numbers;
~~means for detecting an incoming call from an HTTP client on the public-switched-telephone-network line;~~
means for establishing a point-to-point HTTP session with ~~[[an]]~~ the HTTP client on the public-switched-telephone-network line when ~~[[an]]~~ the incoming call from ~~[[an]]~~ the HTTP client is detected; and
means for interacting with ~~[[an]]~~ the HTTP client over an established point-to-point HTTP session without the necessity of packet switched communications, an intervening packet-routing network, an Internet Service Provider (ISP) or a domain name lookup server~~[[.]]~~;
wherein the established point-to-point HTTP session is a link layer connection generated independently of a network address for the HTTP server by using a physical address of the HTTP server.

16. (Currently Amended) The server of claim 15, further comprising means for serving HTTP requests from the HTTP client for resources that do not reside on the HTTP server.

17. (Currently Amended) A point-to-point HTTP HyperText Transfer Protocol (HTTP) server associated with a telephone number, the HTTP server comprising:
a modem resource capable of connection to a ~~public-switched-telephone-network~~ Publicly Switched Telephone Network (PSTN) line such that, when connected to the PSTN line, the modem resource can establish a link layer connection with a client using physical addressing;
the modem resource further capable of identifying an incoming call received over the public-switched-telephone-network line and initiated by the client that parsed the associated telephone number from a domain name field for comparison to one or more open telephone numbers;

one or more processors to establish the link layer connection with the client using physical addressing; and

a point-to-point HTTP service capable of serving non-packetized HTTP requests received over the established link layer connection from the client via the modem resource without the necessity of an intervening packet-routing network.

18. (Previously Presented) The server of claim 17, wherein the modem resource is capable of establishing multiple link layer connections to different clients, and wherein the point-to-point HTTP service is capable of serving concurrent HTTP requests from multiple clients via the modem resource.

19. (Currently Amended) The server of claim 18, further comprising a ~~TCP~~ Transmission Control Protocol (TCP) driver, wherein each of the different clients ~~client~~ connects to the server by requesting a connection to a TCP port designated for the service, and the service identifies the different clients by TCP socket.

20. (Previously Presented) The server of claim 17, further comprising a default resource to be returned to the client when the client submits an empty resource request.

21. (Currently Amended) The server of claim 17, further comprising an HTTP remote retrieval service capable of serving remote resources to a client, where those remote resources are not physically located on the server but are hosted on a separate host connected to the server by a data network.

22. (Previously Presented) The server of claim 17, wherein the modem resource comprises a data network tunnel to a remote network access device.

23. (Currently amended) An HTTP HyperText Transfer Protocol (HTTP)-enabled appliance comprising:

one or more processors to parse a domain name field for a telephone number that

identifies a point-to-point HTTP server, to compare the parsed telephone number to one or more open telephone numbers identifying one or more open point-to-point HTTP connections;

a public-switched-telephone-network modem to access a public-switched-telephone-network line when an open telephone number matching the parsed telephone number does not exist ~~capable of initiating calls;~~

~~a processor~~ the processors further capable of operating in conjunction with the public-switched-telephone-network modem so as to establish a link layer point-to-point HTTP session with ~~[[a]]~~ the point-to-point HTTP server without being provided a domain name or a network address for the point-to-point HTTP server; and

a web browser capable of generating an HTTP request for transmission over ~~[[an]]~~ the established link layer point-to-point HTTP session and capable of receiving a response to that HTTP request over the established link layer point-to-point HTTP session without being provided a domain name or a network address for the point-to-point HTTP server.

24. (Currently Amended) An HTTP HyperText Transfer Protocol (HTTP)-enabled appliance comprising:

means for parsing a domain name field for a telephone number that identifies a point-to-point HTTP server;

means for comparing the parsed telephone number to one or more open telephone numbers identifying one or more open point-to-point HTTP connections;

means for initiating a data calls call over a public-switched-telephone network using a physical address to establish a link layer point-to-point HTTP session with the point-to-point HTTP server when an open telephone number matching the parsed telephone number does not exist;

~~means for using a physical address to establish a point-to-point HTTP session with a point-to-point HTTP server via the data call initiating means; and~~

means for generating an HTTP request for transmission over [[an]] the established point-to-point HTTP session; and

means for receiving a response to the HTTP request over the established point-to-point HTTP session without the necessity of an intervening packet-routing network and without the

necessity of a network address exchange.

25. (Currently Amended) An apparatus comprising a computer-readable medium containing computer instructions that, when executed, cause a processor or multiple communicating processors to perform a method for operating a client that retrieves resources using HTTP HyperText Transfer Protocol (HTTP) commands, the method comprising:

parsing a domain name lookup field for a telephone number that identifies a point-to-point HTTP server;

determining whether an open HTTP connection having the telephone number exists;
~~comparing the parsed telephone number to any open numbers identifying any open HTTP connections;~~

~~when an open number matching the parsed telephone number~~ when the open HTTP connection having the telephone number does not exist, accessing a public-switched-telephone-network line;

dialing, on the accessed line, the parsed telephone number for the point-to-point HTTP server;

indicating that the client requests termination of the line as an HTTP connection to the point-to-point HTTP server; and

establishing a link layer connection with the point-to-point HTTP server using physical addressing; and

interacting with the point-to-point HTTP server over the accessed line using framed HTTP protocol requests and responses.

26. (Currently Amended) An apparatus comprising a computer-readable medium containing computer instructions that, when executed, cause a processor or multiple communicating processors to perform a method for operating a point-to-point HTTP HyperText Transfer Protocol (HTTP) server associated with a telephone number, the method comprising:

monitoring a public-switched-telephone-network line for incoming calls;
receiving an incoming call generated by a client that parsed the associated telephone number from a domain name field for comparison to one or more open telephone numbers;

comparing a transmitted indicator included in [[an]] the received incoming call to a predefined indicator;

when the transmitted indicator matches the predefined indicator, terminating the received incoming call with a call connection to the server;

establishing a link layer connection with the point-to-point HTTP server using physical addressing; and

interacting with [[a]] the client served by the connection using framed HTTP requests and responses without the necessity of an intervening packet-routing network.

27. (Previously Presented) The method of claim 1 further comprising closing an open connection associated with the open telephone number when the open telephone number does not match the parsed phone number.

28. (Previously Presented) The HTTP-enabled appliance of claim 23 further comprising the processor opening a circuit switched connection when a telephone number substitutes a domain name in a domain name field.

29. (Currently Amended) The HTTP-enabled appliance of claim 24 wherein a presence of [[a]] the telephone number in a Uniform Resource Locator (URL) controls circuit switched connectivity.

30. (Currently Amended) The method of claim 25 wherein a non-Internet-Service-Provider (ISP) connection is established with a website in response to the presence of [[a]] the telephone number in a Uniform Resource Locator (URL) and an ISP connection is established with the website in response to the presence of a domain name in the URL.